

CLAIMS:

1. A hockey stick blade with a shank and a blade element having a front surface and a rear surface, said hockey stick blade comprising:
 - (a) a core of synthetic material extending along a longitudinal axis;
 - (b) a layer of fibers recovering at least partially said core of synthetic material; and
 - 10 (c) a layer of thermoplastic material recovering at least partially said layer of fibers, said layer of thermoplastic material forming part of one of said front and rear surfaces of said blade element.
2. A hockey stick blade as defined in claim 1, wherein said core comprises a blade element portion and a shank portion with a tenon portion.
- 15 3. A hockey stick blade as defined in claim 2, wherein said layer of fibers also recovers said shank portion of said core.
- 20 4. A hockey stick blade as defined in claim 3, wherein said layer of thermoplastic material form part of said front and rear surfaces of said blade element.
5. A hockey stick blade as defined in claim 4, wherein said shank comprises a front surface and a rear surface, said layer of thermoplastic material also forming part of said front and rear surfaces of said shank.
- 25 6. A hockey stick blade as defined in claim 5, wherein said layer of thermoplastic material comprises a front thermoplastic sheet and a rear thermoplastic sheet, said front and rear thermoplastic sheets forming part of said respective front and rear surfaces of said blade element and said shank.

7. A hockey stick blade as defined in claim 6, wherein said sheets of thermoplastic material are made of thermoplastic material selected from the group consisting of polyethylene, polyurethane, polypropylene, polyester, polystyrene, polyvinyl chloride and cellulose acetate.

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8. A hockey stick blade as defined in claim 7, wherein said core is made of thermo-expandable foam selected from the group consisting of polyurethane foam, ethylene vinyl acetate (EVA) foam, polyvinyl chloride (PVC) foam, ethylene polypropylene foam and polyisocyanurate foam.

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9. A hockey stick blade as defined in claim 8, wherein said core comprises a first portion located above a second portion;

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10. A hockey stick blade as defined in claim 9, wherein said layer of fibers comprises a first fibers braid covering said first portion and a second fibers braid covering said second portion.

11. A hockey stick blade as defined in claim 10, wherein said layer of fibers further comprises a third fibers braid covering said second fibers braid.

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12. A hockey stick blade as defined in claim 11, wherein said layer of fibers further comprises a fourth fibers braid covering said first and third fibers braids.

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13. A hockey stick blade as defined in claim 12, wherein said first, second, third and fourth fibers braids are made of woven fibers selected from the group consisting of carbon fibers, glass fibers, KEVLAR fibers, ceramic fibers, boron fibers, quartz fibers, spectra fibers, polyester fibers and polyethylene fibers.

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14. A hockey stick blade as defined in claim 13, wherein said first, second, third and fourth fibers braids are made of fibers crossing at between 30° and 60°.
15. A hockey stick blade as defined in claim 14, wherein said blade comprises an interface between said first and second portions, said interface comprising fibers oriented transversely relative to the longitudinal axis of said core.
16. A hockey stick blade as defined in claim 15, wherein said shank comprises a tenon adapted to be inserted into a hollow hockey stick shaft.
17. A hockey stick blade as defined in claim 16, wherein one of said front and rear thermoplastic sheets comprises an indicia.
18. A hockey stick blade with a shank and a blade element having a front surface and a rear surface, said hockey stick blade comprising (a) a core of synthetic material extending along a longitudinal axis; and (b) a layer of fibers recovering at least partially said core of synthetic material, wherein one of said front and rear surfaces of said blade element comprises a layer of thermoplastic material that recovers at least partially said layer of fibers.
19. A hockey stick blade as defined in claim 19, wherein said front surface of said blade element comprises a layer of thermoplastic material recovering at least partially said layer of fibers, said layer of thermoplastic material comprising a front thermoplastic sheet.
20. A hockey stick blade as defined in claim 20, wherein said rear surface of said blade element comprises a layer of thermoplastic material recovering at least partially said layer of fibers, said layer of thermoplastic material further comprising a rear thermoplastic sheet.

21. A hockey stick blade as defined in claim 21, wherein said core comprises a blade element portion and a shank portion with a tenon portion and said layer of fibers further recovers said shank portion of said core.
- 5 22. A hockey stick blade as defined in claim 21, wherein said shank comprises a front surface and a rear surface, said front and rear thermoplastic sheets also forming part of said respective front and rear surfaces of said shank.
- 10 23. A hockey stick blade as defined in claim 22, wherein said thermoplastic sheets are made of thermoplastic material selected from the group consisting of polyethylene, polyurethane, polypropylene, polyester, polystyrene, polyvinyl chloride and cellulose acetate.
- 15 24. A hockey stick blade as defined in claim 23, wherein said core is made of thermo-expandable foam selected from the group consisting of polyurethane foam, ethylene vinyl acetate (EVA) foam, polyvinyl chloride (PVC) foam, ethylene polypropylene foam and polyisocyanurate foam.
- 20 25. A hockey stick blade as defined in claim 24, wherein said layer of fibers comprises a fibers braid and epoxy.
- 25 26. A hockey stick blade as defined in claim 25, wherein said fibers braid is made of woven fibers selected from the group consisting of carbon fibers, glass fibers, KEVLAR fibers, ceramic fibers, boron fibers, quartz fibers, spectra fibers, polyester fibers and polyethylene fibers.
- 30 27. A hockey stick blade as defined in claim 26, wherein said fibers braid is made of fibers crossing at between 30° and 60°.
28. A hockey stick blade as defined in claim 27, wherein said shank comprises a tenon adapted to be inserted into a hollow hockey stick shaft.

29. A hockey stick blade as defined in claim 28, wherein one of said front and rear thermoplastic sheets comprises an indicia.